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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/699,968
Filing Date: November 03, 2003
Appellant(s): BOMERS, FLORIAN U.

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 1-2-2009 appealing from the Office action mailed 7-22-2008.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

Davenport et al.	US 2004/0263477 A1	12-2004
Bear et al.	US 20040257341 A1	12-2004
King et al.	US 20030071842 A1	04-2003

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 23 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The applicant has failed to disclose what the user configured mathematical scaling is comprised of. The applicants have disclosed a mathematical function but do not disclose if mathematical scaling is configured within this function.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The mathematical scaling is not explicitly disclosed in the specification, therefore it is unclear exactly what applicant deems as mathematical scaling.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-4, 6-8, 11-14, and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1) in view of Bear et al ("Bear" 20040257341 A1).

Claim 1: Davenport discloses a computer readable medium storing a computer program comprising:

program instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors(abstract; Page 4, Paragraph 59 and 64);

program instructions to associate each event translator with a type of incoming input event responsive to user input (abstract; Page 4, Paragraph 59 and 64); and

program instructions to configure a translation behavior for each event translator responsive to user input such that during execution of computer program by PC the event translator generates a desired translated input event responsive to receiving an incoming input event to said PC of the type of incoming input event associated with the event translator, including program instructions to define a translation function that modifies incoming input events to said PC according to one or more user configured functions. (abstract; Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

However Davenport does not explicitly disclose that the computer is configured for execution by a personal computer (PC). However Bear discloses a system wherein the invention of translating inputs is performed by the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have

been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 2: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks(Bear provides the PC operating system) to detect event messages associated with incoming input events corresponding to one or more types of computer input devices (Davenport: Page 4, Paragraph 59). Here inputs are received and translated.

Claim 3: Davenport and Bear disclose a computer readable medium storing a computer program of claim 1 above, and further discloses wherein program instructions to create event translators that translate incoming input events to said PC into translated input events according to user-defined translation behaviors comprise program instructions to create one or more operating system hooks to receive event messages associated with incoming input events corresponding to one or more types of computer input devices (Davenport: Page 4, Paragraph 59). Here inputs are received and translated.

Claim 4: Davenport and Bear disclose a computer readable medium storing a computer program of claim 1, wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to define an incoming-to-translated input event mapping that sets the type of translated input event to be generated (Davenport: Page 4, Paragraph 59).

Claim 6: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input event is swallowed or passed-through (Davenport: Page 5, Paragraph 66). Here inputs are linked together if need be representing a swallow or pass instruction.

Claim 7: Davenport and Bear disclose a the computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input event causes a one-shot translated input event or causes a repeating translated input event (Davenport: Page 5, Paragraph 65).

Claim 8: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, and further discloses wherein program instructions to configure a translation behavior for each event translator responsive to user input comprises program instructions to determine whether the incoming input event triggers an activation of or a focus shift to a targeted program (Davenport: Page 5, Paragraph 70-72).

Claim 11: Davenport discloses a method of adapting a personal computer (PC) such that its response to one or more types of input events is modified according to user-configured event translation behavior, the method comprising:

wherein each event translator maps incoming input events to said PC of a selected type into translated input events according to a defined translation behavior (Page 4, Paragraph 59 and 64); wherein the defined translation behavior includes modifying one or more event parameters of the incoming input events (Page 5, Paragraph 67)

configuring the defined translation behavior for each event translator based on user input to the PC (Page 4, Paragraph 59 and 64); and

detecting input events of the selected types incoming to the PC and translating those incoming input events into corresponding translated input events according to the defined translation behaviors of the one or more event translators (Page 4, Paragraph 59 and 64).

However Davenport does not explicitly disclose defining one or more event translators for execution by said PC. However Bear discloses a system wherein the invention of translating inputs is performed in the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 12: Davenport discloses a method of modifying input event behavior in a personal computer (PC), the method comprising:

associating each event translator with a selected type of incoming input event to said PC responsive to input by a user(Page 4, Paragraph 59 and 64);

defining a translation behavior of each event translator responsive to input by a user; including defining a translation function that modifies incoming input events to said PC according to one or more user configured functions(Page 4, Paragraph 59 and 64; Page 5, Paragraph 67); and

generating translated input events in said PC based on executing associated ones of the event translators responsive to detecting incoming input events to said PC of the selected types(Page 4, Paragraph 59 and 64).

However Davenport does not explicitly disclose defining one or more event translators for execution by said PC. However Bear discloses a system wherein the invention of translating inputs is performed in the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 13: Davenport and Bear disclose a method as claim 12, wherein generating translated input events in said PC based on executing associated ones of the event translators responsive to detecting incoming input events to said PC of the selected types comprises:

detecting operating system events to said PC(Bear: Inherently provides an OS within its computer system Page 3, Paragraph 74-75) that are associated with the selected types of incoming input events; and for each detected incoming input event of a selected type, translating that incoming input event according to the translation behavior defined for

the associated event translator or translators(Davenport: Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 14: Davenport discloses a computer readable medium storing a computer program, comprising:

program instructions to enable a user to select a type of input event to said PC from a plurality of input event types;

program instructions to determine whether a given input event to said PC occurring during execution of the computer program by said PC matches the selected type of input event; and program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event. (Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

However Davenport does not explicitly disclose that the computer is configured for execution by a personal computer (PC). However Bear discloses a system wherein the invention of translating inputs is performed by the computer (Page 3, Paragraph 74 and Figure 15c; Page 10, Paragraph 130-131). Davenport has also disclosed that the peripheral action language (PAL) can be embodied outside of the input device (Figure 4b; Page 4, Paragraph 58). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to provide the functionality of the computer executing the instructions in Davenport as taught by Bear. One would have

been motivated to allow the computer to perform the execution because it improves the efficiency of the system being that the PC provides more powerful processors.

Claim 15: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above but does not explicitly disclose a program that comprises a WINDOWS™ based program configured for execution on a WINDOWS™ based PC. However Davenport and Bear do utilize a PC to interact with the invention and **official notice** is taken that windows and windows based programs are notoriously well known operating systems for PC's.

Claim 16: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to enable a user to select a type of input event to said PC from a plurality of input event types comprise program instructions to enable selection from a plurality of event types include two or more of mouse events, keyboard events, MIDI events, Universal Serial Bus device events, RS-232 serial bus events, game port events, audio input events, analog input events, and infrared port events (Davenport: Page 4, Paragraph 58 and 64).

Claim 17 : Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions program instructions to perform a desired input event translation by processing the given input according to **one or more** input event translation rules if the given input event matches the selected type of input event comprise program instructions to perform one or more of a plurality of translations comprising a re-mapping of the given input event type to one or more other input event types, a time-delay of the given input event, a parameter modification of the given input event, a swallowing of the given input event to hide it from one or more other computer processes, and a swallowing of the given input event to hide it from additional event translation processing (Davenport: Page 5, Paragraph 66). By linking the two actions it swallows one of initial input actions.

Claim 18: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to re-map input events of the selected type into input events of at least one other type (Davenport: Page 4, Paragraph 59).

Claim 19: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein said translation function that modifies incoming input events according to one or more user-configured functions comprises

program instructions to modify one or more event parameters of input events of the selected type (Davenport: Page 4, Paragraph 59 and 64; Page 5, Paragraph 67).

Claim 20: Davenport and Bear disclose a computer readable storing a program as in Claim 14 above and further discloses wherein the program instructions to perform a desired input event translation by processing the given input according to one or more input event translation rules if the given input event matches the selected type of input event comprise program instructions to time-delay input events of the selected type according to a desired time delay value (Davenport: Page 5, Paragraph 66). Allows user to change time interval.

Claim 21: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above and further disclose wherein including program instructions to define a translation function that modifies incoming input events according to one more user-configured functions comprises including program instructions to modify one or more event parameters of the incoming input events (Davenport: Page 5, Paragraph 67). A single press is modified to multiple possible actions changing the parameters of that event.

Claim 22: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 21 above and further discloses wherein the program instructions to modify one or more event parameters of the incoming input events

comprise program instructions to apply a user configured mathematical function at least to selected types of incoming events (Davenport: Page 5, Paragraph 67). A single press action is modified to multiple possible press actions changing the parameters of that event, this is considered a mathematical function because it takes a single input and adds multiple input actions to that single input.

Claim 23: Davenport and Bear disclose a computer readable medium storing a computer program of claim 21, wherein the program instructions to modify one or more event parameters of the incoming input events comprise program instructions to apply a user configured mathematical scaling to one or more event parameters of a user selected type of incoming input event to thereby create corresponding translated input events of the same user selected type, but with one or more scaled event parameters. (Davenport: Page 5, Paragraph 67 and 71). Here mathematical calculation (scale) is proved to determine a type of input.

Claim 24: Davenport and Bear disclose a computer readable storage medium storing a computer program of claim 14, wherein the program instructions to perform a desired input event translation by processing the given input event giving input according to one or more input event translation rules if the given input matches the selected type of input event comprise program instructions to swallow the given input event to hide it from one or more other computer processes, or to swallow the given input event to hide it from

additional event translation processing(Davenport: Page 5, Paragraph 67 and 71). Davenport discloses the ability of a check in paragraph 71, therefore a swallow functionality is provided. It also would have been obvious to swallow the input event any number of reasons that are needed for the program in use.

Claims 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davenport et al ("Davenport" US 2004/0263477 A1) and Bear et al ("Bear" 20040257341 A1) in further view King et al ("King" US 20030071842 A1).

Claim 9: Davenport and Bear disclose a computer readable medium storing a computer program as in claim 1 above, but does not explicitly disclose comprising program instructions to display a graphical user interface on a display screen of said PC, and wherein the graphical user interface is configured to enable a user to graphically define one or more event translators, and graphically link one or more selected incoming input events to one or more translated input events through the one or more graphically defined event translators. However King discloses dynamic and user defined events and further discloses graphically linking events (Figure 15). Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention graphically link events in Davenport as taught by King. One would have been motivated to provide a graphical representation to improve operability of the system with visual feedback.

Claim 10: Davenport, Bear and King disclose a computer readable medium storing a computer program as in claim 9 above, and King also discloses enabling the user to drag-n-drop selected ones of those incoming input event types into an input event field, and into a translated input event field, and to make desired event translation connections between respective incoming input events in the input event field and respective translated input events in the translated input event field (Page 10, Paragraph 119).

(10) Response to Argument

Appellant argues the 112 rejection applied against the mathematical scaling. Appellant submits that one of ordinary skill in the art would figure out the aspects of the invention without undue experimentation. Though examiner is aware of the general meaning of mathematical scaling, there is no explicit understanding brought forth in the specification; examiner is therefore concerned with the use as applied to the instant application. The appellant discloses that a mathematical scaling will be applied to the event parameters, so this is unclear - will a specific form of scaling be utilized for the invention or will any form of scaling work? Appellant has provided areas in the specification that are to disclose mathematical scaling, however the paragraphs do not

mention mathematical scaling in name and only cursorily mention a mathematical function. Examiner is unsure if the office is to make this leap and connect scaling with the mathematical function and come up with mathematical scaling.

Appellant further argues that Davenport and Bear do not disclose an input translator configured for execution by the personal computer.

First, "In Anderson's-Black Rock, Inc. v. Pavement Salvage Co., [t]he two [pre-existing elements] in combination did no more than they would in separate, sequential operation." Id. at ___, 82 USPQ2d at 1395. This being said the functionality of appellant's invention being incorporated within the pc does not make the invention novel. Secondly, Davenport discloses that translator and input devices can be embodied separately (Figure 4b), but a general understanding is once a device is connected it is part of that computer because it now operates as a complete system. This is no more than any other external device that once connected is incorporated by the complete system. This can be simply looked upon in this manner. Though the external device can process information what is done from this point, it must then communicate with the other parts of the computer system to perform or execute the desired action. The independent functionality is more used as a way to be incorporated with multiple computer systems. Bear is provided to show that a computer system can expand its functioning capabilities with this expansion thereby improving the system.

Appellant also argues that Davenport and Bear do not provide hook functionality. By the combination of the invention of Davenport and Bear the functionality of a

complete expanded computer system is obtained. Therefore within the complete system an input would be taken and provided extended or alternate functionality.

Appellant also argues the meaning of swallowing, examiner disagrees. The swallowing event can take on many forms, for example making one event appear as another by modifying the execution. Also applicant has only proved exemplary definitions in the specification and the claims recite none of the detailed limitations argued or disclosed. Appellant can not claim an explicit definition for a term when it is provided with multiple alternative options which could be also be applied. This lack of a concrete definition also provides other possible interpretation.

Appellant also argues that program does not trigger activation of targeted program. Examiner disagrees. Davenport shows matches of actions in paragraph 72. These activations do not have to solely be associated to a movement. The movement of the scroll could easily relate to activations of a specific window, area, etc. (ex. the right scroll movement could be an action to bring window in the right quadrant into focus).

Appellant argues that events of a PC that are associated with selected types of incoming input events and translating those inputs events according to the translation behavior is not disclosed. By the combination of the invention of Davenport and Bear the functionality of a complete expanded computer system is obtained. Therefore within the complete system an input event would be taken and translated according the translation behavior functionality of Davenport.

Appellant argues against examiners Official Notice that is taken to show how Windows and Windows based programs use are well known in the art. Examiner also notes that the davenport may stress the portability but also discloses the ability to provide a system that can be separate of the input device and therefore that system can be easily incorporated within in a pc as an add-on within that Windows functionality. Additionally incorporation of Windows functionality is demonstrated in Davenport (Page 3, Paragraph 32) and Bear shows a MS Windows command (Page 6, Paragraph 96). This clearly shows that the system could have been incorporated with a windows based program.

Lastly appellant argues that the time delay instructions of Davenport are in error. Examiner disagrees. The button press in Davenport present a time delay because the pressing of this button would normally cause an action to be performed but once the system recognizes the extended press the signal is not sent (time delay) caused by the system not user. For example, this would work well in a gaming system because the user may press a button and upon that press an action within the system would be performed (shoot, jump, etc) but once the system recognizes the extended press the action is delayed by the system and further processed to possibly perform additional actions along with that first action.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Sherrod Keaton/

Examiner, Art Unit 2175 (4/9/2009)

Conferees:

/Stephen S. Hong/
Supervisory Patent Examiner, Art Unit 2178

/WILLIAM L. BASHORE/
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